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## Abstract of the Disclosure

A device increases the surface smoothness of a turned surface. The device comprising a control system with a control unit and an actuator connectible to the control unit and connectible with a tool holder. The actuator is adapted to impart a vibrating motion in the lateral direction to the tool holder. A method will also increase the surface smoothness of a turned surface, comprising the step of controlling the vibrations of the tool holder during turning. The method also comprises the step of imparting a vibrating motion in the lateral direction to the tool holder. Moreover, a turning lathe and a turning tool holder which like the device are designed to generate vibrating motion in the lateral direction.